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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
2126	16

DATE MAILED: 03/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,071

Applicant(s)

JAKOBSON ET AL.

Examiner

Li B. Zhen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 33 are pending in the application.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 13 recites the limitations "said parsed event channel," "receive a raw event from said message parsing service" and "transmit said raw event to said network management service" in line 1 – 4. Claim 13 recites a parsed event channel that handles raw events. According to the specification, a parsed event channel only handles parsed messages [p. 24, lines 6 – 10]. As best understood by the examiner according to the specification, for the purpose of examination, the examiner will replace "raw event" with "parsed message" in lines 1 – 4 of claim 13.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 8, 16 – 19, 22, 25, 28, 29, 32 and 33 are rejected under 35

U.S.C. 102(e) as being anticipated by U.S. Patent NO. 6,118,936 to Lauer.

7. As to claim 16, Lauer teaches correlating [correlation of the different types of events is performed using programmable analysis rules; col. 3, line 57 – col. 4, line 5] network event messages [receives and processes information relating to network events; col. 3, lines 40 – 57] on a computer network comprising a message parsing service [receive network events 404, Fig. 4; col. 6, lines 43 – 52], an event correlation service [SNMS 300 to perform alarm correlation, Fig. 3; col. 5, lines 57 – 67], and a knowledge database [Network Topology Databases 334, Fig. 3; col. 5, lines 55 – 67] coupled together via a plurality of interfaces [the logical system components of SNMS 300, Fig. 4; col. 6, lines 33 – 43], the method comprising the steps of:

receiving a raw event at the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements; col. 6, lines 43 – 54];

parsing the raw event by the message parsing service [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54];

transmitting the parsed event to the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40];

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utilizing data stored in the knowledge database to derive an event from the parsed event [receives network topology and configuration data from the Network Topology Databases 334...this data is used to correlate network events and to perform impact assessments on such events; col. 6, lines 52 – 63]; and

transmitting the derived event to one of a plurality of operator workstations [data from the Alarming 302 and Reporting 304 servers are transmitted to workstation sites, col. 6, lines 21 – 33; detailed process of the Display Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 21] regardless of a significance of the derived event [all network events are input to the SNMS Alarming Server 302 for analysis and correlation; col. 5, lines 39 – 45].

8. As to claim 17, Lauer teaches transmitting the derived event from the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40] to a network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402. It also supports user interactions, such as alarm clears, acknowledgments, and trouble ticket submissions; col. 7, lines 16 – 29] and transmitting the derived event from the network management service to one of a plurality of operator workstations [detailed process of the Display

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Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 35].

9. As to claim 18, Lauer teaches correlating network event messages [correlation of the different types of events; col. 3, line 57 – col. 4, line 5] on a computer network comprising a network mediation service [SWIFT 326 and LSE 330 illustrates one embodiment of a typical telecommunications network in which different types of elements are in place requiring different transport mechanisms; col. 5, lines 18 – 39], a message parsing service [receive network events 404, Fig. 4; col. 6, lines 43 – 52], an event notification service [Process Events 402, which runs primarily on the SNMS Alarming Server 302, is responsible for receiving events from other SNMS components, processing these events; col. 6, lines 20 – 33], an event correlation service [SNMS 300 to perform alarm correlation, Fig. 3; col. 5, lines 57 – 67], and a knowledge database [Network Topology Databases 334, Fig. 3; col. 5, lines 55 – 67] coupled together via a plurality of interfaces, the method comprising the steps of:

receiving a raw event at the network mediation service from an external computer network [receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52];

transmitting the raw event to the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52];

parsing the raw event by the message parsing service [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54];

transmitting the parsed event to the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40];

utilizing data stored in the knowledge database to derive an event from the parsed event [receives network topology and configuration data from the Network Topology Databases 334...this data is used to correlate network events and to perform impact assessments on such events; col. 6, lines 52 – 63]; and

transmitting the derived event to one of a plurality of operator workstations [data from the Alarming 302 and Reporting 304 servers are transmitted to workstation sites, col. 6, lines 21 – 33; detailed process of the Display Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 21], regardless of a significance of the derived event [all network events are input to the SNMS Alarming Server 302 for analysis and correlation; col. 5, lines 39 – 45].

10. As to claim 19, Lauer teaches transmitting the raw event from the network mediation service to the event notification service [events are received by the SNMS Alarming Server 302 in a First In/First Out (FIFO) queue; col. 9, lines 25 – 33] and transmitting the raw event from the event notification service to the message parsing service [Receive Network Events component 404...receives network events from the

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various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52].

11. As to claim 22, Lauer teaches transmitting the parsed event from the message parsing service to the event notification service [component parses the events and sends them to Process Events 402 for analysis; col. 43 – 54] and transmitting the parsed event from the event notification service to the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40].

12. As to claim 25, Lauer teaches transmitting the derived event from the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40] to the event notification service [Process Events 402, which runs primarily on the SNMS Alarming Server 302, is responsible for receiving events from other SNMS components, processing these events; col. 6, lines 20 – 33], transmitting the derived event from the event notification service to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29], and transmitting the derived event from the network management service to one of a plurality of operator workstations [data from the Alarming 302 and Reporting 304 servers are transmitted to workstation sites, col. 6,

lines 21 – 33; detailed process of the Display Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 21].

13. As to claim 28, Lauer teaches correlating [correlation of the different types of events; col. 3, line 57 – col. 4, line 5] network event messages [receives and processes information relating to network events; col. 3, lines 40 – 57] on a computer network comprising a network mediation service [SWIFT 326 and LSE 330 illustrates one embodiment of a typical telecommunications network in which different types of elements are in place requiring different transport mechanisms; col. 5, lines 18 – 39], a message parsing service [receive network events 404, Fig. 4; col. 6, lines 43 – 52], an event notification service [Process Events 402, which runs primarily on the SNMS Alarming Server 302, is responsible for receiving events from other SNMS components, processing these events; col. 6, lines 20 – 33], and a network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29] coupled together via a plurality of interfaces, the method comprising the steps of:

receiving a raw event at the network mediation service from an external computer network [receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52];

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transmitting the raw event to the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52];

parsing the raw event by the message parsing service [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54];

transmitting the parsed event to the network management service [component parses the events and sends them to Process Events 402 for analysis; col. 43 – 54], regardless of a significance of the parsed event [all network events are input to the SNMS Alarming Server 302 for analysis and correlation; col. 5, lines 39 – 45].

14. As to claim 29, Lauer teaches transmitting the parsed event from the message parsing service to the event notification service [component parses the events and sends them to Process Events 402 for analysis; col. 43 – 54], and transmitting the parsed event from the event notification service to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29].

15. As to claim 32, this is an apparatus claim that corresponds to method claim 16; note the rejection to claim 16 above, which also meets this apparatus claim.

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16. As to claim 33, this is a system claim that corresponds to method claim 18; note the rejection to claim 18 above, which also meet this system claim.

17. As to claim 1, Lauer teaches correlating network events [correlation of the different types of events is performed using programmable analysis rules; col. 3, line 57 – col. 4, line 5] among a number of client services comprising: at least one computer comprising a memory having program instructions and a processor [Signaling Network Management System 300, Fig. 3; col. 4, lines 33 – 50] configured to use the program instructions to provide:

a network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29];

an event notification service [Process Events 402, which runs primarily on the SNMS Alarming Server 302, is responsible for receiving events from other SNMS components, processing these events; col. 6, lines 20 – 33];

a network mediation service [SWIFT 326 and LSE 330 illustrates one embodiment of a typical telecommunications network in which different types of elements are in place requiring different transport mechanisms; col. 5, lines 18 – 39] adapted to receive a raw event from an external computer network [various SS7 network elements] and transmit the raw event to the event notification service [receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52];

a message parsing service adapted to receive a raw event from the event notification service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52], parse the raw event [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54], and transmit the parsed event to the event notification service [component parses the events and sends them to Process Events 402 for analysis; col. 43 – 54]; and

an event correlation service [SNMS 300 to perform alarm correlation, Fig. 3; col. 5, lines 57 – 67] coupled to a knowledge database comprising correlation knowledge Network Topology Databases 334, Fig. 3; col. 5, lines 55 – 67], the event correlation service adapted to receive the parsed event from the event notification service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40], utilize data stored in the knowledge database to derive an event from the parsed event [receives network topology and configuration data from the Network Topology Databases 334...this data is used to correlate network events and to perform impact assessments on such events; col. 6, lines 52 – 63]; and

transmit the derived event to one of a plurality of operator workstations via the event notification service [data from the Alarming 302 and Reporting 304 servers are transmitted to workstation sites, col. 6, lines 21 – 33; detailed process of the Display Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 21],

regardless of a significance of the derived event [all network events are input to the SNMS Alarming Server 302 for analysis and correlation; col. 5, lines 39 – 45], wherein the network mediation, message parsing, event notification and network management services are coupled together via a plurality of interfaces [the logical system components of SNMS 300, Fig. 4; col. 6, lines 33 – 43].

18. As to claim 2, Lauer teaches the network mediation service is adapted to interface with at least one external computer network [SWIFT 326 and LSE 330 illustrates one embodiment of a typical telecommunications network in which different types of elements are in place requiring different transport mechanisms; col. 5, lines 18 – 39].

19. As to claim 3, Lauer teaches receiving a raw event at the network mediation service [via systems such as SWIFT 326 and LSE 330] from the external computer network [various SS7 network elements] and transmitting the raw event to the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52].

20. As to claim 4, Lauer teaches the message parsing service is adapted to receive a raw event from the network mediation service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems

such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52] and produce a parsed event [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54].

21. As to claim 5, Lauer teaches the message parsing service is adapted to route the parsed event [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54] to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29] via the event notification service [Process Events 402].

22. As to claim 6, Lauer teaches the message parsing service is adapted to route the parsed event [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54] to the event correlation service via the event notification service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40].

23. As to claim 7, Lauer teaches the network management service is adapted to interface with a plurality of operator workstations [Display Alarms component 412...supports user interactions, such as alarm clears, acknowledgments, and trouble ticket submissions; col. 7, lines 16 – 29].

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24. As to claim 8, Lauer teaches receive data requests from the plurality of operator workstations [SNMS Alarming Server 302 has an interface with a Trouble Management System 342. This allows SNMS users at the client workstations 312 to submit trouble tickets for SNMS-generated alarms; col. 6, lines 13 – 21] and transmit the data requests to the event correlation service via the event notification service [Process Topology component 406...receives network topology and configuration data...from Manual Overrides 336; col. 6, lines 52 – 66].

Claim Rejections - 35 USC § 103

25. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

26. **Claims 9 – 15, 20, 21, 23, 24, 26, 27, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauer in view of U.S. Patent NO. 6,477,585 to Cohen.**

27. The reference to Cohen was cited in the previous office action.

28. As to claim 9, Lauer teaches a queue [events are received by the SNMS Alarming Server 302 in a First In/First Out (FIFO) queue; col. 9, lines 25 – 33] for receiving a raw event [Receive Network Events component 404...receives network events from the various SS7 network elements; col. 6, lines 43 – 54], parsing the raw

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event [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54], a queue for receiving parsed events [queue is a First In/First Out (FIFO) queue that feeds the Process Events component 402 with network events; col. 8, lines 9 – 30], correlating the parsed event [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40], a database for storing derived events [active alarm database; col. 7, line 56 – col. 8, line 5], transmitting the derived event to operator workstations [detailed process of the Display Alarms component 412 is illustrated. This process component provides the results of SNMS processing to the user (referred to as the "operator"); col. 12, lines 3 – 21], and asynchronous communication of events [an Asynchronous Data Communications Network 320 is used to transport events; col. 5, lines 8 – 23].

29. Although Lauer clearly teaches the desire to store and handle the raw, parsed and derived event separately and providing asynchronous communication of event, Lauer does not specifically teach an event channel for each type of event.

However, Cohen teaches an event management service [col. 1, lines 57 – 67] in a distributed computing environment [col. 2, lines 33 – 50] and event channels [column 5, lines 38 – 61; column 9, lines 39 – 62].

30. It would have been obvious to a person of ordinary skilled in the art at the time of the invention to apply the teaching of event channels as taught by Cohen to the invention of Lauer because event channels allow multiple suppliers to communicate with multiple consumers in an asynchronous way [col. 1, lines 48 – 50 of Cohen] and allow

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events to be transparently supplied in an asynchronous manner [col. 1, lines 65 – 67 of Cohen].

31. As to claim 10, Lauer as modified teaches the event notification service is further comprised of at least one filter [filters are predefined, but can be modified by each operator to define the view that his/her GUI process will display; col. 12, lines 28 – 60 of Lauer].

32. As to claim 11, Lauer as modified teaches at least one filter is coupled to at least one of the plurality of event channels [first stage filter for SVC events are the SVC routing destination SVC messages that are routed to EMS will be sent through the EMS event channel; col. 11, lines 23 – 36 of Cohen].

33. As to claim 12, Lauer as modified teaches the raw event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] is adapted to receive a raw event from the network mediation service [via systems such as SWIFT 326 and LSE 330 of Lauer] and transmit the raw event to the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52 of Lauer].

34. As to claim 13 (note the U.S.C. 112 second paragraph rejection above), Lauer as modified teaches the parsed event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] is adapted to receive a parsed event from the message parsing service [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54 of Lauer], and transmit the parsed event to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29 of Lauer].

35. As to claim 14, Lauer as modified teaches the parsed event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] is adapted to receive a parsed event from the message parsing service [component parses the events and sends them to Process Events 402; col. 6, lines 43 – 54 of Lauer] and transmit the parsed event to the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40 of Lauer].

36. As to claim 15, Lauer as modified teaches the derived event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] is adapted to

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receive a derived event from the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40 of Lauer], and transmit the derived event to network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29 of Lauer].

37. As to claim 20, this is rejected for the same reason as claim 12 above.

38. As to claim 21, Lauer as modified teaches transmitting the raw event from the raw event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] to at least one event filter [Event Filters; col. 11, lines 13 – 54 of Cohen] and transmitting the raw event from the at least one event filter to the message parsing service [Receive Network Events component 404...receives network events from the various SS7 network elements...via systems such as SWIFT 326 and LSE 330; col. 6, lines 43 – 52 of Lauer].

39. As to claim 23, this is rejected for the same reason as claim 14 above.

40. As to claim 24, Lauer as modified teaches transmitting the processed event from the parsed event channel [EMS 22 acts as an "event channel" to uncouple one or more

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event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] to at least one event filter [Event Filters; col. 11, lines 13 – 54 of Cohen], and transmitting the processed event from the at least one event filter to the event correlation service [If it is an SS7-related event, Process Events 402 applies a selected algorithm, such as create alarm or correlate to existing alarm; col. 7, lines 32 – 40 of Lauer].

41. As to claim 26, this is rejected for the same reasons as claim 15 above.

42. As to claim 27, Lauer as modified teaches transmitting the processed event from the derived event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] to at least one event filter [Event Filters; col. 11, lines 13 – 54 of Cohen], and transmitting the processed event from the at least one event filter to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29 of Lauer].

43. As to claim 30, Lauer as modified teaches receiving the parsed event at a parsed event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen], processing the parsed event by the parsed event channel [component

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parses the events and sends them to Process Events 402; col. 6, lines 43 – 54 of Lauer], and transmitting the processed event from the parsed event channel to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29 of Lauer].

44. As to claim 31, Lauer as modified teaches transmitting the processed event from the parsed event channel [EMS 22 acts as an "event channel" to uncouple one or more event suppliers 24a-24n from the one or more event consumers 26a-26n; col. 5, lines 36 - 63 of Cohen] to at least one event filter [Event Filters; col. 11, lines 13 – 54 of Cohen], and transmitting the processed event from the at least one event filter to the network management service [Display Alarms component 412...includes the Graphical User Interface (GUI) and associated software which supports topology and alarm presentation, using data supplied by Process Events 402; col. 7, lines 16 – 29 of Lauer].

Conclusion


45. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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March 25, 2004


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